



February 14, 2006

Stephen L. Johnson  
Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Dear Administrator Johnson:

**Request to Require Registration of Silver Ion Pesticide Products**

The National Association of Clean Water Agencies (NACWA)<sup>1</sup> respectfully requests that the U.S. Environmental Protection Agency (EPA) review and consider registering as pesticides consumer products that by design contain contaminants which can end up in our sewer systems and waterways. The latest example of such a product is a washing machine that uses silver ions as a disinfectant. NACWA's member agencies are very concerned about the water quality impacts from the discharge of silver ions from this new machine as well as from other residential pesticide uses.

NACWA members have noted the increased marketing of household products that contain pesticides, such as mattress liners and clothing impregnated with permethrin. Products such as these will generate discharges of pesticides to the sewer system when they are laundered. Because of the adverse environmental impacts that can occur from these releases, NACWA believes these products should be registered as pesticides under the Federal Insecticide, Fungicide, and Rodenticide ACT (FIFRA) or some other relevant authority to guarantee that their impacts receive a thorough review. These concerns have been expressed in previous letters from NACWA.

The new washing machine is now being marketed under manufacturer claims that it achieves a 99.99 percent sterilization of bacteria and provides a silver ion residual on clothing that is effective up to 30 days. The washing machine is specifically designed to release silver ions during each wash cycle. These silver ions will then be discharged into sanitary sewer systems when the clothing is washed.

Silver is highly toxic to aquatic life at low concentrations and can bioaccumulate in some aquatic organisms, such as clams. Due to concerns about toxicity and

<sup>1</sup> Founded in 1970, NACWA represents the interests of nearly 300 of the nation's publicly owned treatment works. NACWA members serve the majority of the sewered population in the United States and collectively treat and reclaim over 18 billion gallons of wastewater every day.

NACWA Letter on Products Containing Silver  
February 14, 2006  
Page 2

strict silver effluent limits in discharge permits, publicly owned wastewater treatment works (POTWs) have implemented pollution prevention programs to identify and reduce silver discharges to sanitary sewer systems. These programs have been very successful in reducing POTW influent and effluent silver concentrations. However, widespread use of household products that release silver ions into sanitary sewer systems could greatly increase silver concentrations in POTW influents and effluents, leading to adverse effects on our nation's waterways.

POTWs are required by EPA and States to monitor their effluent for whole effluent toxicity (WET) and comply with strict toxicity limits in their National Pollutant Discharge Elimination System (NPDES) permits. The addition of this toxic metal will jeopardize their ability to meet these WET limits. While POTWs have the authority to regulate industrial and commercial sources of silver and other toxic pollutants, they have little or no control over the discharge of pollutants from the thousands of households they serve. POTWs are ultimately subject to monetary penalties for the violations of their discharge permits that could result from the silver discharges from such residential applications.

It is distressing to POTWs to observe the increasing prevalence of household products that use pesticides for general antimicrobial purposes. POTWs are proud of their history of taking effective actions that reduce discharges of toxic pollutants to the environment. Silver is a toxic element that cannot degrade in the environment and is registered as a pesticide in numerous products. To allow the unrestricted use of a product that intentionally releases silver into the environment would be an irresponsible neglect of the principles of environmental sustainability that should strongly influence such decisions.

In summary, NACWA recommends that EPA require the registration of products that use silver ions as disinfectants, including washing machines. We also ask, that during the registration process, EPA obtain data on the silver ion concentrations and wash cycle volumes used in such washing machines. This data should be used to impose necessary restrictions to ensure that water quality standards are not exceeded. In addition, ongoing monitoring and reporting of unit sales and silver releases should be required to determine whether registration should be continued or canceled.

Thank you for your consideration of this matter. If you have any questions or need more information, please contact Susie Bruninga, NACWA Manager of Regulatory Affairs, at (202) 833-3280 or at [sbruninga@nacwa.org](mailto:sbruninga@nacwa.org).

Sincerely,



Ken Kirk  
Executive Director

Cc: Benjamin Grumbles, Assistant Administrator, EPA Office of Water  
Susan B. Hazen, Acting Assistant Administrator, EPA Office of Prevention, Pesticides, and Toxic Substances  
Jim Jones, Director, EPA Office of Pesticides Programs  
Jim Hanlon, Director, EPA Office of Wastewater Management

2